

### **REMARKS**

Claims 51-77 are pending in the above-captioned patent application after this amendment. Claims 10, 29-31, 33, 34, 36 and 48-50 have been rejected. Claims 16-24, 26, 32, 35 and 37-47 were withdrawn from consideration. Claims 10, 16-24, 26 and 29-50 have been canceled without prejudice and claims 51-77 have been added by this amendment for the purpose of expediting the patent application process in a manner consistent with the goals of the Patent Office pursuant to 65 Fed. Reg. 54603 (September 8, 2000), even though the applicant believes that the previously pending claims were allowable.

Further, a Request for Continued Examination (RCE) has been filed concurrently herewith. In view of the RCE, the previous Final Restriction Requirement of the Patent Office is believed to be moot.

Support for new claims 51-77 can be found throughout the originally filed application, including the originally filed claims, the drawings and the specification. More specifically, support for new claims 51-77 can be found at least in Figures 1, 2A and 2B, and in the specification at page 4, line 26 through page 5, line 7, and at page 7, line 27 through page 11, line 17. No new matter is believed to have been added by this amendment. Consideration of the pending application is respectfully requested.

### **Rejections Under 35 U.S.C. § 103**

Claims 10, 29-31, 33, 34, 36 and 48-50 are rejected under 35 U.S.C. § 103(a) as being unpatentable over IBM Technical Disclosure Bulletin, November 1990 (hereinafter "IBM") in view of Nakazawa et al. (JP 10-69763). Claims 10, 29-31, 33, 34, 36 and 48-50 have been canceled without prejudice by this amendment. Therefore, the rejection is believed to be moot.

### **New Claims**

New claims 51-77 have been added by this amendment. New claims 51-77 are of a slightly different scope than the previously pending claims. However, in view of the cited references, claims 51-77 are believed to be patentable.

First, IBM is directed toward an enclosure including an outer cover and an inner

frame that provides electromagnetic compatibility ("EMC") shielding for external peripheral devices. IBM does not teach or suggest that the enclosure is designed to provide magnetic shielding for a disk drive.

Further, the enclosure disclosed in IBM teaches that the "dimensions [of the enclosure] are such that 10-15 dB of shielding is provided for vertically polarized fields ...." IBM discloses that obtaining the specific level of EMC attenuation is purely a function of "the distance from the face of the enclosure to the noise source or sensitive circuit" and "the width of the opening in the enclosure". IBM does not teach or suggest that the attenuation levels are achieved due to the materials used for the enclosure. In fact, materials are not even mentioned in the reference.

In addition, assuming *arguendo* that the enclosure is being analogized with the drive housing of the claimed invention, IBM teaches an EMC attenuation of field for vertically polarized fields (perpendicular to the disk surface) of 10-15 dB. IBM does not teach or suggest using a shield portion that has an attenuation of field for magnetic fields of at least 25 dB.

Additionally, IBM does not teach or suggest any minimum level of relative permeability of the material used to form the enclosure. Stated another way, IBM does not teach or suggest using materials with a relative permeability to achieve the desired level of attenuation.

Based on the computer translation provided by the Patent Office, Nakazawa et al. appears to be directed toward an electromagnetic shielding used for an optical disk player (such as a CD player) that includes an optical pickup 4. The purpose of the shielding taught by Nakazawa et al. (electromagnetic) appears to be similar or identical to that of IBM. (See, for example, paragraphs 0005, 0006, 0011, 0012, 0013, 0015, 0016, 0017, 0018 and 0020). Nakazawa et al. discloses that power transformers, because of the flux generated from the power transformer has had a "bad influence" on the operation of the optical pickup 4. (Paragraph 0003). Thus, Nakazawa does not teach or suggest shielding a storage disk from external magnetic fields.

Further, Nakazawa et al. suggests that an electric conduction paste, foils or fibers can be applied to various surfaces of the outer frame 1 of the optical disk player and the covering of the optical pickup 4. (Paragraph 0012). Stated another way,

Nakazawa teaches adding a layer of material onto the entire, already-existing housing that surrounds an optical disk player. Thus, Nakazawa et al. does not teach or suggest using a shield that has a thickness that is substantially similar to the thickness of the housing. Further, Nakazawa et al. does not teach or suggest that the shield portion is homogeneously formed with the drive housing throughout the thickness of the drive housing. Moreover, Nakazawa et al. does not teach or suggest selectively positioning the shield so that certain areas of the housing use the shield, while other areas of the housing do not need to use the shield.

Somewhat similar to IBM, Nakazawa et al. does not appear to teach or suggest that specific materials be used which can attain any specific level of attenuation of field. More specifically, Nakazawa et al. does not teach or suggest a drive housing having a shield portion having an attenuation of field of 25 dB in a perpendicular direction relative to the optical disk player.

In contrast to the cited references, claim 51 is directed toward a disk drive that requires "a storage disk having a substantially planar disk surface; and a drive housing that retains the storage disk, the drive housing having a housing thickness that is measured in a first direction, the drive housing including a shield portion having a shield thickness measured in the first direction that is substantially similar to the housing thickness, the shield portion being formed from a material having a relative permeability that provides an attenuation of field of at least approximately 25 dB in a direction substantially perpendicular to the disk surface to at least partially shield the storage disk from an external magnetic field." These features are not taught or suggested by the cited combination of references. Therefore, claim 51 is believed to be allowable. Because claims 52-59 depend directly or indirectly from claim 51, they are also believed to be allowable.

Further, claim 60 requires "a storage disk; and a drive housing that retains the storage disk, the drive housing having a housing thickness, the drive housing including a shield portion that is homogeneously formed with the drive housing substantially through the housing thickness, the shield portion being formed from a material having a relative permeability that provides an attenuation of field of at least approximately 25 dB in a direction substantially perpendicular to the storage disk to at least partially shield

the storage disk from an external magnetic field." These features are not taught or suggested by the cited combination of references. Therefore, claim 60 is believed to be allowable. Because claims 61-68 depend directly or indirectly from claim 60, they are also believed to be allowable.


Claim 69 is directed toward a disk drive that requires "a storage disk; and a drive housing defining a housing interior that retains the storage disk, the drive housing having an exterior surface and an interior surface, the drive housing including a shield portion that is selectively positioned so that at least part of the exterior surface is devoid of the shield portion, the shield portion being formed from a material having a relative permeability that provides an attenuation of field of at least approximately 25 dB in a direction substantially perpendicular to the storage disk to at least partially shield the storage disk from an external magnetic field." These features are not taught or suggested by the cited combination of references. Therefore, claim 69 is considered to be allowable. Because claims 70-77 depend directly or indirectly from claim 69, they are also believed to be allowable.

### **Conclusion**

In conclusion, Applicant respectfully asserts that claims 51-77 are patentable for the reasons set forth above, and that the application is now in a condition for allowance. Accordingly, an early notice of allowance is respectfully requested. The Examiner is requested to call the undersigned at 858-487-4077 for any reason that would advance the instant application to issue.

Dated this 1<sup>st</sup> day of September, 2005.

Respectfully submitted,

  
JAMES P. BRODER  
Attorney for Applicant  
Registration No. 43,514

THE LAW OFFICE OF STEVEN G. ROEDER  
5560 Chelsea Avenue  
La Jolla, California 92037  
Telephone: (858) 487-4077